

A MONSTER CANNON

BIGGEST GUN IN WORLD BUILT FOR OUR COAST DEFENSES.

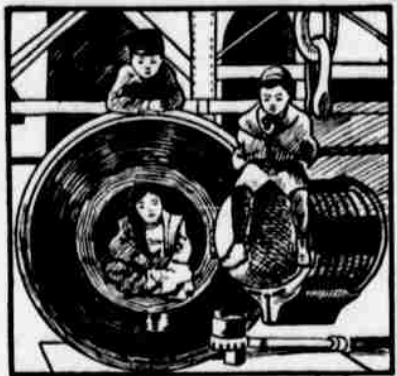
Weights 130 Tons and Fires a 2,500-Pound Projectile Over Thirty Miles—Now Being Tested at Sandy Hook.

As in the case of a good many other things, the United States leads the world in the building of big ordnance. There is now at Sandy Hook proving grounds the biggest cannon ever turned out in the world. Not even the Krupp gun works of Germany have ever dreamed of making such a gun.

The weapon referred to is 20 yards long and weighs 130 tons. The projectile discharged by this monster is 16 inches in diameter and five feet long and weighs a ton and a quarter.

The charge of smokeless powder is of 1,000 pounds weight, and when the projectile leaves the muzzle it is traveling at the rate of 2,300 feet a second. The cost of each shot fired, at the lowest estimate, is \$1,500.

The gun has been discharged eight times. It is calculated that it can be



IN THE BREECH OF THE MONSTER GUN.

fired 300 times before it will become so worn that it will be necessary to relapse the bore, after which it will be good for 300 more rounds before another relining.

In order to make these prodigious guns strong enough to withstand the powder pressure, which is as high as 40,000 pounds to the square inch, they are built of successive layers of hoops, each shrunk on the layer underneath. In this monster there are four layers.

Special machinery had to be constructed for handling this great amount of steel. From the beginning of the work until the final inspection was nearly three years, and the approximate cost was \$150,000. The gun was made at Watervliet arsenal, near Albany. Its great length and weight prevented the use of the railway in its transportation, so a great wrecking lighter received it at the wharf of Watervliet from a specially constructed steel car, whence it was floated to the proving grounds at Sandy Hook.

This piece of ordnance has not been mounted, and because of its unprecedented length and weight it will never be possible to secure an elevation greater than 15 degrees. It is well known that 45 degrees gives a projectile its greatest range.

As it is, however, this ton and a quarter of solid metal, driven by a full charge of smokeless gunpowder, will describe an arc 30 miles in length, the highest point of which will be more than three miles above the surface of the land or sea. Starting from Sandy Hook in quest of a hostile battleship it would not catch sight of the vessel until it had climbed well up into the sky.

It is impossible, of course, for any ship to carry and handle such a colossal gun. And all similar cannon are for harbor and coast defence.

Nor does it seem possible ever to construct a battleship powerful enough to withstand the terrific impact of one of the solid shots. The strongest iron-clad ever launched would be shattered and sunk by a single missile that went home, and any ship approaching from the sea would have to steam four-fifths across the zone of fatal danger to itself before drawing nigh enough to give effect to its own fire.

CAUSES OF FAILURES.

Lack of Capital Takes the Lead and Incompetence Comes Next.

Some interesting figures have recently been published in Bradstreet's showing the number of business failures last year in the United States and the causes to which they are attributable. It is stated that there were 1,201,862 concerns engaged in business in 1901, and that of these 10,648 failed, or considerably less than one per cent. of the whole, a lower percentage than has occurred in any year since 1882, save in the year 1900.

Bradstreet's classifies the causes of failures under eleven heads, and gives also the number which it regards as attributable to each cause. Of the eleven, "lack of capital" takes the lead as most prolific in inducing failures, those ascribed to it numbering 3,323. "Incompetence" comes next on the list, and is made accountable for 2,927, and then "specific conditions," by which is meant such things as strikes, the corn crop failure, the assassination of President McKinley, the lowered price of cotton at the south and similar events of a disastrous tendency. To these 1,755 business failures are traced. Next in number were failures arising from "fraudulent dispensation of property" and amounting to 1,154.

German Proverb.

A lean compromise is better than a fat lawsuit.

SPORTS AND ATHLETICS

Basketball on horseback is the latest and also one of the most dangerous and thrilling sports thus far devised. The game has found considerable favor among New York's rich young men, for it is only the well-to-do who can afford to play it.

Four players make up a team. The play is exactly the same as in the ordinary basketball foot. Scoring is similar and the object, of course, is to throw the ball into your opponent's basket, thereby scoring a goal.

When the signal is given to begin play each side, all the players mounted, lines up under its own basket. When the referee tosses the ball into the center of the playing space one man from each four dashes out at full speed toward the rolling ball and dives from his horse in the effort to be the first to touch it. The player touching the leathern sphere first is entitled to its possession.

With the ball on his arm he is allowed to remount and dash for his opponent's goal. As the rules require that no player hold the ball more than five seconds, the object of the play is for the side that has the ball to advance toward the opponent's goal by continually passing the ball from one to the other, always going forward until, the lucky moment arrived, one of the players can toss the ball into the enemy's basket.

Passing is the great feature of the game. So expert have the star players become that they can dash up and down the court, wheeling and turning and charging, keeping up all the time a continuous passing. All the players catch the ball with one hand and guide their mounts with the other.

Opposing players, of course, make their efforts to get the ball by blocking the passes. Once the ball falls to the ground the other side dives for it, too. That is their chance to rush it toward the other goal. As in the case of the opening play, the player who touches the ball first gets its undisputed possession until he mounts and is off toward the goal.

All this sounds very easy, but those who have tried it think differently. Sometimes an exigency of the play will see five or six men diving simultaneously for the ball toward the bouncing ball right under the hoofs of the nags. There is a pretty good chance of being hurt, but so expert have the game's devotees become that they can dive under a horse for the ball and come out unscathed. Of course, there is always a chance of catching a flying hoof in the forehead,



PASSING THE BALL TO A TEAM MATE.

and then you get out of the game all right, perhaps forever.

Mounted basketball is being taken up in other cities where there are armories or riding academies, but there are only a few daring spirits anywhere who are willing to risk their lives at the sport. Even polo, which is only mounted hockey, and one of the most dangerous sports of fashion, seems tame after a game of basketball by mounted players.

Though so dangerous, basketball on horseback is a fascinating sport to watch. Even the horses get imbued with the sport and enter into the excitement of the game with all the enthusiasm of the players. After a month's play, a pony will follow the ball without a guiding hand. In more than one recent game the extra horses on the side lines have been known to jump within the inclosure of their own accord and, though riderless, to follow the ball about until caught and led back to the side lines.

You have to have money to play basketball on horseback. Horses get tired during the heat of the game, just as polo ponies tire, and they must be replaced by fresh steeds. A string of four ponies is none too many for a hot game. The keep of such a string is expensive, with the wages of a groom, extra. Then there are all sorts of riding equipments necessary, and the toys in which to play the game. Anybody who goes into the game seriously must count on spending at least a couple of thousand dollars for the fun he expects to have.

Sufficient.

Mrs. Borden—I'm glad you like the rooms. But—er—excuse me—can you give me any references? As you are a stranger, I know, I—

Mr. Bentlar—I quite understand. I have no references, but I can show you receipted board bills from every landlady I ever had.

Mrs. Borden—Send your trunk right up.—Cleveland Leader.

Getting Back.

Lord De Fendous—Pardon me for saying it, but you Americans have such beastly manners, y' know. Nobody I met, ovah there, knew how to dress correctly, speak grammatically, or even eat decently, bah Jove!

Miss O'Hio—what a pity it is you couldn't have had an opportunity to meet any of our nice people!—Cleveland Leader.

The House He Built Her.

BY E. L. DITHRIDGE.

(Copyright, 1905, by Daily Story Pub. Co.) "Yes," said the elder man, "you may, but only after you have complied with a certain condition."

The other leaned forward eagerly, hoping the condition would be within his powers to perform. His eyes glowed; his lips parted; his hands clasped, and his fingers twisted anxiously, during the pause that ensued. Then the condition came, short, forcible and abrupt:

"First build her a house!" Well, it was a hard requirement at best, and almost an impossible one. Yet he made up his mind at once that he would comply with the condition.

James Burton was a young engineer trying to make his fortune in the mines of Mexico. He had no money with which to start independently, so he had engaged as an assistant in the employ of a large company operating near Mexico City. He had now been in the country six months, and during that period had grown to love the daughter of a wealthy ranch owner. The "ranchero" had practically no English education himself, but had provided a way for the education of his children in both English and Spanish. His eldest daughter, Aurora, had attended a boarding school in Philadelphia.

Aurora was as sensible as she was bright. None of the fickle, flirty character of the Spanish race seemed to belong to her. Her dark eyes had plenty of fire in them, but there was never any duplicity back of it.

Burton loved her, not merely because she was captivating, but because she combined those sterling qualities admired by every man of serious nature.

When he met her he knew at once it was a case of "settle down and grow up with the country," for here was not only his professional work, but his heart's ideal also.

He had not yet proposed to Aurora. He had a theory that it should not be necessary, except as a matter of form, and that any man who was refused was a fool and ought to be. He claimed that lovers should learn to understand each other in the language of love before attempting to make use of any other language.

He knew Aurora loved him, and all he wanted was the parental sanction. Now he had obtained it, but with a difficult condition imposed.

How could he build her a house? He was drawing only \$120 per month. Enough, you say? Remember that this is the debased currency of Mexico; and that the things that must be purchased with it are all marked away up to the standard of the United States currency. A man who is worth two dollars a day in the United States gets only two dollars in Mexico; but a pair of shoes worth two dollars in the United States costs eight or ten dollars in Mexico.

How, then, you say, can the native Mexicans live on from fifty cents to a dollar a day in Mexican money? They wear a shirt, a pair of overalls, a blanket and a pair of sandals—no more; and they eat pancakes and beans, pancakes and beans, pancakes and beans.

So how was James Burton to support himself on \$120 a month and build a house besides? You don't know, and neither did he; but he determined to do it just the same.

Finally he got an idea: He waited for a good opportunity, and then broached the subject to the manager of the company, a Mr. Langdon.

"Mr. Langdon," he said, "if you'll build me a little three-room adobe house, I'll stand half the cost."

"You being getting married?"

"Not yet, no. But I want to as soon as I can get a house."

"Sorry, my boy; sorry; but the company won't allow me to make such an expenditure at this time. Later on, when our drifting reaches those rich veins that show on the surface of the hill, and we get to running that rich stuff through the mill here, there may be a different story to tell; but just now, I cannot do it."

He went back to his work in the assay room. He thought about it all day. Night came, and he crawled into his bunk. What could he do? There must be some way of solving this problem! He had solved other problems, mining problems, many of them; why couldn't he solve this?

By means of many inquiries he had satisfied himself that \$250 Mexican was a safe estimate of the cost of a three-room adobe house built so as to be barely comfortable. A ridiculously low figure, to be sure! But it would take him a long time to save that much, and if the adobes weren't made during March, April and May, he'd have to wait another year. It still lacked two weeks to the first of March—time enough to build the foundation—and the company had plenty of lime and stone on hand. Maybe Mr. Langdon would let him have lime and stone enough for the foundation if he assumed the responsibility of paying the wages. There was a mason working on a small addition to the mill building; maybe he would work on the foundation of the little house during spare time.

Burton figured that the wages on the foundation would cost him twenty dollars, that the adobes would cost him forty dollars, and that he could get half the quantity delivered in March and the other half in April. Then he could get about twenty dollars' worth of work done each month until the house was completed.

As a site for her house he selected the brow of a little hill about a mile from the reduction plant and about half a mile from the line of the com-

pany's property. There he started a man excavating, for he had decided to deviate from the Mexican custom and have a little cellar.

Every evening he would trot out on horseback and take a look at the progress being made. He was rather disappointed at the slow rate of advance, but couldn't blame the workman, for the cause of the trouble was self-evident. Right in the middle of the hole stuck a point of rock formed in a perfect cone. The workman had tried to dig it out; but as he dug the rock seemed to grow; and by this time it was "a plain case of blast."

Getting this big rock out of the way meant more expense; and the thought of it made Burton blue.

As he stood there musing on how much extra the rock would cost him, he kicked at it absent-mindedly and vindictively.

The sun was just setting, and its rays struck squarely on the place where his boot had scraped off the earth from the stone.

"My! That's a mighty bright sort of stone!" thought Burton to himself. "Guess I'll knock off a bit and see what it looks like inside."

The house he built her was not finished till two years later; but it was located in the American section of the City of Mexico, instead of out in the wilderness.

It was built of cut stone instead of baked mud, and contained thirty rooms instead of three. Its lights were electric instead of tallow. Its windows were trimmed with onyx, and its mirrored halls with marble. Many an opal decked its boudoirs; many a guest adorned its dining-room; for its hostess entertained with a lavish hand and was never called on to economize.

One of these functions I was permitted to attend; and I heard her father say:

"Burton, you've made a fine success!"

"I owe it all to you," he replied. "You made me attempt to build her a house; and 'twas then I struck the mine."

THE AIREDALE TERRIER.

Breed of Dog That Is Just Now Considered the Paragon of Dog Town.

Dogs, much all else, depend largely on Dame Fashion for popularity, and be it said to her ladyship's shame merit seldom enters into the least of her calculations, says Hubert Reeder, in Recreation. For once, however, she seems to have called common sense into consultation, and in placing the seal of her approval upon the Airedale terrier she simply gives credit where due. If ever there was a paragon in dogdom that paragon is certainly the Airedale.

This dog had established an enviable reputation in England before it began to attract the attention of our fanciers. Though it has now belonged to a distinct breed for nearly 50 years, it did not make its appearance in America until late in the '90s. A few specimens were then bought, simply because the breed was fashionable abroad, and the purchasers suffered somewhat of a shock when they first saw their new and costly pets. Airedales are not prepossessing, at first sight, and appreciation of their beauty often comes only with time and familiarity with their good qualities.

Personally, I confess that I took to them right away. The well-poised head, so haughty and thoroughbred; the sturdy body, so clean and symmetrical; the great, yellow eyes, so full of honesty and intelligence, and the proud carriage, speaking so loud of character and strength, made me overlook completely the ugly color and the roughness of their coats.

I once asked a charming New York woman who kept a large kennel of Airedales what made her choose such ugly brutes.

"Why, their very ugliness," she said, promptly; "it is so beautiful and aristocratic." And she was right; their ugliness is both beautiful and aristocratic.

ACCORDING TO THE WIG.

Pedagogue Who Was Governed in His Conduct by the One He Wore.

Charles Lamb was sent to Christ's hospital when he was seven years of age, and carried from the school so distinct a memory of its masters that 40 years afterward he could describe them with exactness. Mr. Lucas, his latest biographer, gives Lamb's account of one teacher, Rev. James Boyer:

He had two wigs, wrote Lamb, both pedantic, but of differing omen. The one serene, smiling, fresh-powdered, betokening a mild day. The other, an old, discolored, unkempt, angry caxon, denoting frequent and bloody execution. Woe to the school when he made his morning appearance in his passy or passionate wig.

J. B. had a heavy hand. Nothing was more common than to see him make a headlong entry into the schoolroom from his inner recess or library, and with turbulent eye, singling out a lad, roar out:

"Od's my life, sirrah, I have a great mind to whip you!" Then, with as sudden a retracting impulse, fling back into his hair, and after a cooling lapse of some minutes, during which all but the culprit had totally forgotten the context, drive headlong out again, piecing out his imperfect sense with the expletory yell:

"And I will, too!" In his gentler moods he had recourse to an ingenious method of whipping the boy and reading at the same time—a paragraph and a lash between.

LEARNING TO BE HANGMAN

The New Incumbent Has Grewsome Rehearsals of His Unenviable Profession.

Several executions took place recently at Pentonville prison on the scaffold which has been the scene of the final exit of numerous notorious criminals, relates London Mail.

The executioner was Alec Taylor, the newly appointed common hangman, and the subjects "hanged" in set form were lay figures of cloth and sand.

It is, of course, essential that the official that has to carry out the last dread sentence of the law should first thoroughly learn the technique of his grewsome profession to insure that when the time comes all the operations will happen decently and in order. Therefore each new hangman immediately after his appointment goes through a realistic course of training. In pursuance of this policy, Taylor, under the guidance of experienced prison officials who have assisted at many executions, is now serving his apprenticeship.

Several sandbags shaped to represent men of different weights were supplied for Taylor's practice. He was instructed that men of varying builds should be given certain prescribed drops to effect instantaneous death. Then a sandbag made to the rough semblance and weight of a man was placed on the scaffold flap. Taylor was told the weight, the noose was properly adjusted, the requisite drop arranged for and the lever pulled. This experiment was performed again and again with differently weighted bags.

The other part of the hangman's training, the pinning of a condemned prisoner, was even more realistic. For the time being stalwart warders posed as condemned murderers. Taylor, practicing on them, was shown the quickest and most effective way of securing the hands and feet.

DEALING IN CIGAR BANDS.

Tobacconists Have Quite a Call for Them as Result of a Fad.

"I want a package of cigar bands," said a bright-faced boy about 12 years old, as he stepped up to the counter in a tobacco shop.

"Ten or 25 cents," asked the proprietor.

"Ten," returned the boy, as he flung down his dime, took his purchase and rushed out.

"Yes, I do quite a business in cigar bands," said the tobacconist, according to the Chicago Inter Ocean. "It is quite a fad among children to get bands and paste them on glass plates and bowls. I sell about as many packages of bands as I do of cigarettes, and there is more profit in it. The youngsters do a thriving business along the line of barter and trade. They take the bands to school and swap duplicates with their schoolmates. A rare band commands a high premium and frequently is worth half a dozen of the more common varieties. The youngsters keep on the alert for bands, too, and they are after every one that comes from the cigars of their fathers and uncles and big brothers."

"In some respects the new fad is not a bad thing for the cigar trade. The bands have been a dead loss to tobacconists, who in the end have to pay for them. They are made in Germany, at least all the fancy varieties, and they add a little to the cost of each cigar. Trifling as it may be, the sum in the aggregate would enable any of us to keep steam yachts and automobiles. By selling the bands at the rate of 25 for ten cents, the cigar manufacturers are able to get back some of the outlay that has been a dead loss to them."

Historic Vermont Town.

Bennington is the most peculiarly interesting of all Vermont towns on account of its historical associations as well as its pictorial beauty. It is situated in the extreme southwestern portion of the beautiful state whose name, derived from two words, signifies "green" and "mountain." It was here that the pride-swollen Burgoyne cast a covetous eye on the supplies and stores gathered from the fertile prolific fields, and to secure which for his hungry mercenaries he sent out on army early in August, 1777, under Col. Baum, composed chiefly of Germans with a scattering of British.—From "The Charm of Historic Bennington," by G. Marion Burton, in Four-Track News.

"Admiral" Not English.

The word "admiral" is not of English origin, but is from the Arabic "Emil el Bagh," or Lord of the Sea. Captain comes from the Latin caput, but mate is from Icelandic, which means a companion or equal. Coxswain was originally the man who pulled the left oar in the captain's boat. This in turn is a corruption of the word coracle, a small round boat used on the Wye and Usk rivers. So coxswain comes to us from the Welsh.

The Little Pitcher.

"Now," said the fond father to his little daughter, "I must go to town and earn some money to buy bread and butter for little Annie."

"And to buy yachts for dada," responded the child, who seemed to have grasped the humility of the situation.—Sporting Times.

Will Change Stamp.

The French postage stamp, which shows a sower sowing against the wind and with the wrong foot advanced, is to be reformed, the reform beginning with the two sous stamp.

ALFONSO AS A SCORCHER.

Spanish King Tempted by the Excellent Roads of France to Speed.

I hardly exaggerate in saying they have made it more dangerous to walk on a public road at night here, says the French correspondent of London Truth, than to face Japanese sharpshooters in battle.

Limiting the pace by police regulations has no effect in the country. The thing is to limit the power of the machine to go beyond a certain speed.

The official reports received at the ministry of the interior on King Alfonso's motor feats on the roads round Biarritz will, I suppose, some day be published. Meanwhile they will lie in the archives of that department.

I hear from an official there that gendarmes were placed along the roads on which he had arranged to drive, not so much to guard him from anarchists and Carlists as to preserve the wayfarers from his impetuosity as a motorist.

It was thought that the sight of a guardian of public order in uniform would remind him of the obligations under which he lay to observe police rules. This sometimes answered.

But it seems that there is such a thing as a motor demon which is often indifferent to consequences, and that a king may be prompted by it like an ordinary mortal. Alfonso was as ready to risk the safety of his novia as his own life. After the rutty roads of Spain and that stony heath, the Camp, he felt in France in a motor paradise and acted accordingly.

Unfortunately he is no exception. The excellence of the French roads, the mildness of the climate, the goodness of the inns and the laxity with which police rules are enforced make France the motorists' recreation ground.

Americans cross the Atlantic to dash about here as recklessly as they please. So do Austrians, Hungarians and Germans. I came across the other day a party of Swedes who had come to motor here because in their own country they were so often obliged to pull up by those gates that cross the Swedish roads in pastoral districts.

NO LONGER A CURIOSITY.

Scientists Are Not Now Regarded as Lions by Captains of Industry.

Exit the traditional scientific man with the traditional Yankee of the stage! Prof. Darlow, president of the American Association for the Advancement of Science, writes that scientists leaders now sit with the captains of industry, not as lions to be stared at but as representatives of science not only applied but pure. The conception of a scientific man as a captain of industry means simply the acknowledgment that science has a practical relation with the world and that fortunately the public has advanced far enough to see that pure science sooner or later develops into applied science.

The leaders of science are to be placed in the class of organizers, managers of a sort of scientific trust. This is science to date. While science is organization its basis is the power of investigating. An organizer is of no use until there is something to organize. And the materials on which the organizer in science must work are not made by machinery, but by the brains of individual workers.

DEPOPULATING IRELAND.

Wholesale Departure of the People for the United States.

The deserted island is the land of Erin. During the last summer whole villages in Cavan, Galway and Donegal have been depopulated and vast country sides in Mayo and Roscommon have been stripped of the remnants of their old time hosts of farm laborers. Everywhere are wholesale departures for the United States. Even in the remotest rural hamlets the old people can be heard lamenting some recent exodus of their most promising young boys and girls. Almost every man or woman, the traveler meets has a number of near relatives who have recently left for the United States. Emigrating agencies exist in every part of the island. Every village has a steamship agent to whose advantage it is to use every inducement to influence the young men and women to emigrate. The flaming posters which they flout in the faces of the young people who are already restive and over-anxious to go, offering the highest transportation and to their mind, for no earnings on the further life of the Atlantic are irresistibly luring to the average Irish villager.

Dog Meat in China.

This little sidelight on life in a Chinese city is clipped from the Peking and Tientsin Times: "Two men who have been killing dogs and cats and selling them to the people as meat in the western part of the city were caught a few days ago, and in investigations by the police revealed a tale of shocking cruelty. One has been sentenced to two weeks and the other to ten days' hard labor, and a very light sentence, too."

Curb Put on Smoking.

Recently the Italian government issued an order that there was to be no smoking in business hours by officials whose duties brought them into contact with the public. For those whose duties do not it is left to the discretion of heads of departments to allow or to forbid smoking. But their discretion is limited to the cigar and the cigarette. No pipes are to be allowed.